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METHOD AND APPARATUS FOR AUTOMATIC POWER-UP AND POWER-DOWN OF A COMPUTER SYSTEM BASED ON THE POSITIONS OF AN ASSOCIATED STYLUS AND/OR HINGE

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ABSTRACT OF THE INVENTION

A method and system for automatic power-up and automatic power-down of a computer system based on the position and/or rotation of an associated stylus and/or hinge. In one embodiment, the computer system is a portable computer having a logic board, a display screen, a digitizer and a receiving slot for an associated stylus. When the stylus is removed from the receiving slot, a switch automatically turns full power onto the computer system thereby allowing a user full use of the computer without requiring an on/off button to be pressed. When the stylus is inserted back into the receiving slot, the switch automatically returns the computer to a power reduction mode where one or all of the components of the computer are powered down. Again, the power reduction mode is entered without requiring the user to press the on/off button. The switch can be made of a single detector or a dual detector combination and can be of a mechanical, electro-magnetic, optical or electrical nature. In another embodiment, the stylus-based automatic power-up and power-down features work in concert with other power-up and power-down mechanisms of the computer, such power-on interrupts, the on/off button, and time-out power off modes. In another embodiment, the stylus is a hinge attached to a cover that can be rotated to protect the computer or rotated away to use the computer. When rotated to cover, the switch automatically powers down the computer. When rotated out for computer use, the switch automatically powers up the computer.